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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|--|-------------|----------------------|----------------------|------------------|
| 10/807,375   | 03/23/2004  | David T. Doughy      | 04-002               | 3946             |
| 30058  | 7590        | 03/20/2006           | EXAMINER             |                  |
| COHEN & GRIGSBY, P.C.<br>11 STANWIX STREET<br>15TH FLOOR<br>PITTSBURGH, PA 15222 |             |                      | LAWRENCE JR, FRANK M |                  |
|  |             |                      | ART UNIT             | PAPER NUMBER     |
|  |             |                      | 1724                 |                  |

DATE MAILED: 03/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                                |  |
|------------------------------|-------------------------------|--------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/807,375 | Applicant(s)<br>DOUGHTY ET AL. |  |
|                              | Examiner<br>Frank M. Lawrence | Art Unit<br>1724               |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>(2)</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Oath/Declaration*

1. Applicant has not given a post office address anywhere in the application papers as required by 37 CFR 1.33(a), which was in effect at the time of filing of the oath or declaration.

A statement over applicant's signature providing a complete post office address is required.

### *Specification*

2. The disclosure is objected to because of the following informalities: In line 21 of page 4, "12" should be changed to "5". In line 4 of claim 2, "or" should be changed to "and" to put it in proper Markush form. In line 2 of claim 12, "adhesive" should be swapped with "adsorbent" to be consistent with the rest of the disclosure.

Appropriate correction is required.

### *Double Patenting*

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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4. Claims 1-11 and 13-17 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 11/077,070. Although the conflicting claims are not identical, they are not patentably distinct from each other because all of the limitations of the instant claims are encompassed and envisioned by the co-pending claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 6-12 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilhelm (2,038,071).

7. Wilhelm '071 teaches an adsorbent system comprising a paper or metal substrate (A) coated with a layer of adhesive (B) and a mono-layer of a granular adsorbent such as charcoal or silica gel (C) on one or both sides of the substrate. The substrate is corrugated and folded into a spiral configuration so that the adsorbent layer on one side of the substrate contacts a side of the substrate that does not contain adsorbent, and can be inserted into a permeable housing (E) having an impermeable sleeve and flow holes (see figures 1, 2, 4, 5, page 2, col. 1, line 56 to

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page 3, col. 1, line 43). In an alternative embodiment, a plurality of substrates can be stacked in a housing (figure 6).

8. Claims 1-3, 6-12 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kasmak, Jr. et al. (4,699,681).

9. Kasmak, Jr. et al. '681 teach a gas permeable filter comprising a perforated substrate coated on one of both sides with a layer of adhesive such as a polychloroprene gel and a monolayer of a granular adsorbent such as activated carbon or alumina (col. 3, lines 3-64). The coated substrate can be stacked in layers (figure 9, col. 6, lines 20-31) or rolled into a spiral configuration so that the layer of adsorbent on one side of the substrate contacts a side of the substrate that does not contain adsorbent at the ends of the coil (figure 5), and can be arranged in a permeable housing having impermeable end caps and perforated inner and outer sections (figure 6, col. 5, lines 8-56).

10. Claims 1, 2, 4-6 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Morris, Jr. (3,702,049).

11. Morris, Jr. '049 teach an air filter comprising a film substrate (10) made of a plastic such as polyethylene or polypropylene that is coated on one or both sides with a granular adsorbent or activated carbon by heating the substrate and adhering the adsorbent to it with a mixture of particles of the same plastic which act as an adhesive (col. 2, lines 5-38). Alternatively, the film can comprise a laminate of high melting point film with a low melting point film on the side to be embedded with adsorbent (col. 2, lines 59-68). A plurality of coated sheets may be stacked (figures 2, 5) or the coated sheet can be arranged in a spiral configuration (figure 7, col. 4, lines 17-24).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Kasmak, Jr. et al. '681 or Wilhelm '071.

14. Either one of Kasmak, Jr. et al. '681 or Wilhelm '071 discloses all of the limitations of the claim except that more than one of the composite adsorbents is combined. It would have been obvious to provide additional adsorbent composites to achieve additional purification based on the level of contamination and the gas flow rate. It is submitted that the multiplying of a structure to achieve an improvement in its desired effect is an obvious modification, see *St. Regis Paper Company v. Bemis Company, Inc.*, 193 USPQ 8, 10.

***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the attached PTO-892 form disclose adsorbent systems for gas treatment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frank M. Lawrence whose telephone number is 571-272-1161. The examiner can normally be reached on Mon-Thurs 7:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frank M. Lawrence  
Primary Examiner  
Art Unit 1724

*Frank Lawrence*  
3-9-06

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